

24 SEASON DRUMS SOCIETY
MANAGEMENT SYSTEM

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ABSTRACT

24 Season Drums Society Management System is an online base management system to automate the managing process of society. The current system of the society is old traditional filing system to record the member profile, resources reservation, and attendance list and do not have a proper management system used and lack of proper platform for support and problem solving solution of member and open users. Therefore this system is develop for automate the managing process of society. There are three target users in this system, which are the administrator, society member and open users. This system has total of twenty main modules in this system, which is Manage donation, resource booking, resource availability, posting news and events, add comments to news & events, manual performance/show timetable, picture gallery, Search on photo, attendance management, management for society account, video gallery, search on video, manage members profile, request for show and performance, performance management, society complaint management, help and information, self timetable, resource/asset management and portal management. Adopting V-model in iterative and incremental development process is used to develop this project. There are separate to 2 phases which are verification phases and validation phases. In verification phases have requirement analysis, system design architecture design and coding. Validation phases have unit testing, integration testing, system testing and acceptance testing. The twenty modules will be divided to various independent parts by incremental development which is 6 divisions, the priority service of these incremental set also arranged in the order which the first set is the highest priority services. This system succeeds to achieve the objectives and solve the problems stated earlier.

ABSTRAK

24 Season Drums Society Management System adalah sistem pengurusan asas untuk megautomasikan proses urusan society. Society managment system adalah system pemfailan tradisional yang lama untuk merekodkan profil ahli, tempahan sumber-sumber, dan senarai kehadiran dan tidak mempunyai sistem pengurusan yang sesuai digunakan dan kekurangan platform yang betul bagi sokongan dan penyelesaian masalah ahli dan pengguna terbuka. Oleh itu sistem ini dibangunkan untuk mengautomaiskan proses pengurusan society. Terdapat tiga pengguna sasaran dalam sistem ini, iaitu pentadbir, ahli society and pengguna terbuka. Sistem ini mempunyai jumlah dua puluh modul utama, iaitu mengurus derma, tempahan sumber- sumber, ketersediaan sumber, berita posting manual jadual persembahan/show, galeri gambar, mencari gambar, pengurusan kehadiran, pengurusan akaun society, galeri video, mencari video, mengurus ahli-ahli profil,permintaan pada persembahan, pengurusan persembahan, pengurusan aduan society,bantuan dan maklumat, jadual individual, pengurusan sumber/aset dan pengurusan portal. Meletakkan V-model dalam iteraton and incremental development process digunakan untuk membangunkan projek ini. Ini terdapat 2 fasa iaitu fasa pengesanan dan fasa pengesahan. Fasa pengesanan terdapat requirement analysis, system design architecture design dan coding. Fasa pengesahan mempunyai have unit testing, integration testing, system testing and acceptance testing. Dua puluh modul ini akan dibahagikan kepada bahagian-bahagian bebas iaitu 6 bahagian, keutamaan set ini juga diatur dalam susunan yang dalam set pertama adalah perkhidmatan keutamaan tertinggi. Sistem ini Berjaya mencapai objektif dan menyelesaikan masalah- masalah yang dinyatakan sebelum ini.

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LIST OF ABBREVIATIONS

PHP	Hypertext Preprocessor
ASP	Active Server Pages
JSP	Java Server Pages
IDE	Integrated Development Environment
SQL	Standard Query Language
HTTP	Hypertext Markup Language
SDD	Software Design Document
DFD	Data Flow Diagram
ERD	Entity-Relationship Diagram

CHAPTER 1

INTRODUCTION

This chapter briefly discuss on the overview of this research. It contains five sections. This first section is introduction; follow by the problem statement. Next are the objectives where the project's goal is determined. After that are the scopes of the system and lastly is the thesis organization which describes the structure of this thesis.

1.1 Background

Today's technologies progressing rapidly than everyone can imagine and keep changing our life style, especially internet service. With the rapid evolution of Information Technologies (IT), especially Internet & Intranet. To many enterprises, the importance of the IT has been unceasingly increasing, more and more getting into the main business of an enterprise in depth. IT eventually becomes a vital part of the enterprise's core competence, which will definitely have a great influence on the decision making and the development strategies of an enterprise in a long run.(jiang Hongxun,2006) The Internet is a global system of interconnected computer networks that use the standard Internet Protocol Suite (TCP/IP) to serve billions of users worldwide. And these networks consists of millions of private, public, academic, business, management and government networks. There is a huge amount of information available on the internet for just about every subject known to man, ranging from government law and services, trade fairs and conferences, market information, new ideas and technical support.

Apply the management system into online system and let technologies to replace paper waste also an another usage of internet. Because of the internet technology, more and more companies prefer to apply their management system through online system. Because building customer relationships is of critical strategic importance to firms in achieving success in the marketplace (Ryals, 2005). The usage of internet is so wide and many business companies try to make full use of it services when dealing with customers. Through web management system, users feel that they not only can save their time and cost, at the same time they can get any information that they want. Because of these features, other than companies, many organizations and societies also follow the step in this rapidly progress technologies world.

Therefore, the 24 season drums society management system is developed to make flow of management can process with more efficiency. The system will provide basic information and background of the society. And the system is separated to 3 different types of users such as open user, member and admin. The system is strictly controlled by the admin.

1.2 Problem Statements

Society members are increasing rapidly due to the increment on the students enrollment. However, society management mostly being done by manually.

It means that all data in each progress all using paper to record so the costs to acquire the society are relatively expensive.

1.3 Objectives

The objectives of this project are:

- To developing the 24season drums society management system using iterative & incremental approach.
- To automate the managing process of 24 season drums society.

1.4 Scopes

The scopes of this project are:

- i. Manage donation
 - to provide a site to let open users or members to get more information about donation
 - Admin has to manage the donator information such as their personal profile information.
 - Admin has to update account balance and make a confirmation once transaction was successful.
 - Provide a site to let public user to give a donation or sponsor.
- ii. resource booking
 - To provide a form fill-in site to let 24 season drums society members apply event/tools.
 - To provide a form fill-in site to let members request for venue booking for training or practice.
- iii. Resource availability
 - Check for latest condition of tools and record.
 - Admin has to update for quantity and quality of tools.
- iv. Posting news and events
 - To provide a site to let admin or members to post the latest information and events
- v. Add comments to news & events
 - To provide a post comment space for 24 season drums society members to post their comments to share their opinion.

- vi. Manual performance/show timetable
 - Admin has to use management processes such as move/add/change, procurement, storage, and disposal to manage the performance and show information.
 - Provide a calendar that full of event schedule to let members and open users to view all the upcoming events.
- vii. Picture gallery
 - Admin able to update the Picture gallery by category to several album.
 - Members and open users can view the photos that snap from performance and others activity.
 - Admin able to add in the information of the photo such at time, performance venue and name of members in photo
- viii. Search on photo
 - Provide search function to let users search wanted photo by key in the related information such as members name, venue and name of performance.
- ix. Attendance management
 - To record the attendance for each training or activity.
- x. Management for society account
 - To manage the member fees and other spent cost.
 - To record all the spent cost and income fees.
- xi. Video gallery
 - Admin able to update the video gallery by category to several album.
 - Members and open users can view the video that recorded from performance and others activity.
 - Admin able to add in the information of the video such at time, performance venue and name of members in photo.

xii. Search on video

- Provide search function to let users search wanted video by key in the related information such as members name, venue and name of performance.

xiii. Manage members profile

- Admin has to use management processes such as move/add/change, procurement, storage, and disposal to manage the member profile.
- Members will provide an ID and password to log in to the website.
- Members can update their profile manually.

xiv. Request for show and performance

- Open user can request for show and performance by key in venue and time to waiting for approval.
- Admin has to check for availability for performance date and discuss with group members by posting new.
- Admin has to reject or approve the request once have an answer for discussion.

xv. Performance management

- Admin has to list down all preparation for each upcoming performance such as uniform and tools need to use.
- Manage for transportation when needed.

xvi. Society complaint management

- To provide a site to let users to make a complaint for anything that related to society to improve the efficiency.

xvii. Help and information

- Provide help and information to solve user problem when using this website.
- Introduce about 24 season drum society to let all user more understand the purpose of 24 drums performance.

xviii. Self timetable

- Let members can manage their own schedule by themselves such as view their own involved performance date and time.

xix. Resource/asset management

- Allow administrator to manage to resources

xx. Portal management

- Allow administrator to manage the portal.

1.1 Thesis Organization

This thesis consists of four (4) chapters. Chapter 1: Introduction briefly describes and introduces the system. This system preliminary shows the basic concept of the system, problem statements of the system, objectives, scopes, and how the report is organized. Chapter 2: Literature Review depicts the manual systems and the existing systems as the case studies of the project. This chapter also reviews the technique, method, equipment, and technology that had been used in the case studies. Chapter 3: Methodology discusses about the overall workflow in the development of the project. This chapter also discusses the method, technique or approach that has been used while designing and implementing the project. Chapter 4: Conclusion briefly summarizes the project.

CHAPTER 2

LITERATURE REVIEW

This chapter will be devoted to a survey from selected methodology and way to adopting, followed by the existing systems that similar with 24 Seasons drums society management system and Support System, development tools.

2.1 Comparison of Selected Methodology

Methodology is an ongoing process where software developers used as guidelines to build system from goal definition to the actual system or final product. It is important to identify and use a suitable methodology that suits the development of the project the developer is doing to ensure every phase and stages are rightly focus and apply to achieve project goals set. Three software methodologies had been identified and considered for the development of Online Industrial Sales and Support System which is as below:

- i) Spiral Model
- ii) Waterfall Model
- iii) Iterative & Incremental
- iv) V Model

2.1.1 Spiral Model

Spiral model was originally created by Barry Boehm in his 1988 article A Spiral Model of Software Development and Enhancement to address the inadequacies of the Waterfall Model and it is also referred as Boehm-Spiral software engineering methodology. This model of development combines the features of the prototyping model and the waterfall model. The spiral model is intended for large, expensive, and complicated projects. The essential and major concept of Spiral model is to reduce risk by the frequent usage of prototypes. The spiral model works and starts at the centre of the spiral.

According to Boehm, “the major distinguishing feature of the Spiral Model is that it creates a risk-driven approach to the software process rather than a primarily document-driven or code-driven process. It incorporates many of the strengths of other models and resolves many of their difficulties” (Boehm, 1988). As shown in Figure 2.1 (Online Interactive Modules for Teaching Computer Science, 1997), each completed cycle along the spiral represents one stage of the process. With each loop of the spiral, the customer can evaluate the work done to the project so that the customer can present suggestions for modification to be done. As the spiral process continues, the software is further developed and enhances to make it more mature and in line with the project goals and requirements.

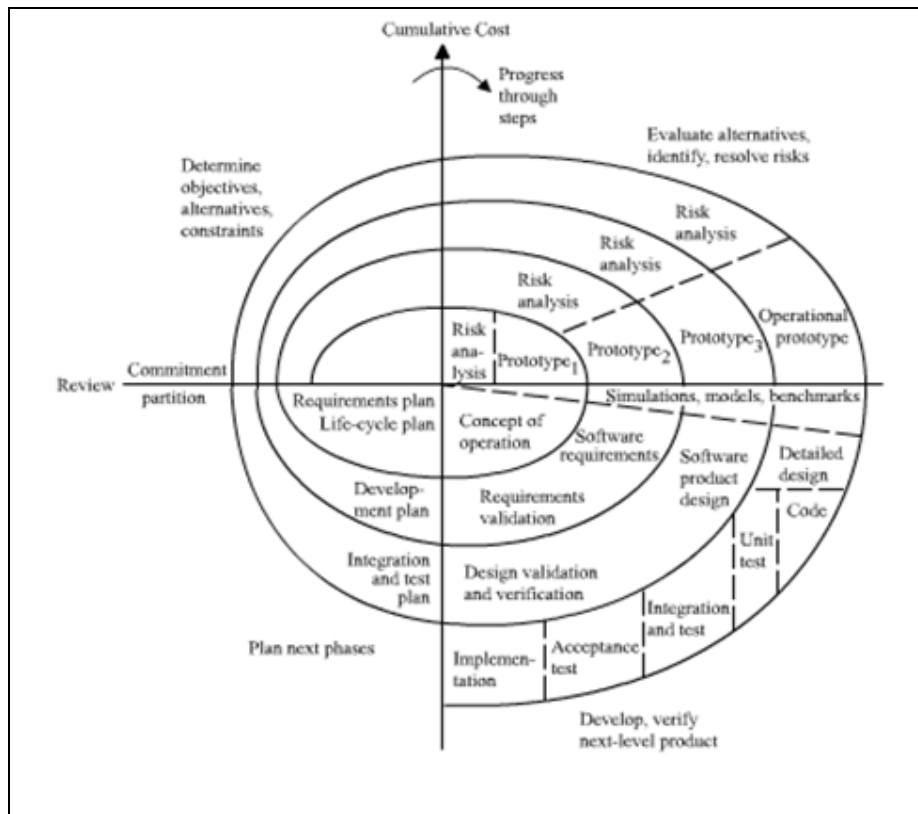


Figure 2.1: Spiral Model

The steps of Spiral Methodology (Freetutes, 2007):

- i) System requirements are defined in the most detail ways as possible which usually involves interviewing a number of users that are vital in the aspects of the existing system.
- ii) A preliminary design is created for the new system.
- iii) Prototype of the system is constructed from the preliminary design and usually is a scaled-down system and represents an approximation of the characteristics of the final system.
- iv) Second prototype is released and evolved based on four steps which are, evaluating the first prototype and identify its strengths, weaknesses and risks. Define the requirements of the second prototype. Plan and design the second prototype and finally construct and test the second prototype.

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- v) Project might be aborted when the risks identified are too great because risk factors could cause development cost to overrun, miscalculation of operating cost and will end up providing a final product that fails to meet its goals and requirement set in the beginning of the project.
- vi) Existing prototype will be evaluated just like how the prototype was evaluated earlier in the steps and if necessary another prototype will be developed.
- vii) Steps are iterated until the customer or user is satisfied that the refined prototype represents the final product desired and then the final system will be constructed based on the refined prototype.
- viii) Finally, the final system will be thoroughly evaluated and tested and routine maintenance is carried out to identify any problems that surfaces and rectify it to enhance the system and make it more stable and in the same time minimizing serious failures and downtime.

2.1.2 Waterfall Model

The waterfall model is a first model of the software development process was derived from other engineering process (Royce, 1970). It is a model which was developed for software development that is to create software. It is called as such because the model develops systematically from one phase to other in a downward fashion, like a waterfall.

Waterfall model has been structured on various phases especially to help out the software construction companies to develop an organized system of construction. The project will divide into many stages by following this method. When start with first Phase and according to this model, only can proceed to next phase once the previous one has been completed. This way one moves progressively to the final stage and once that point is reached, then cannot turn back, similar to the water in a waterfall.

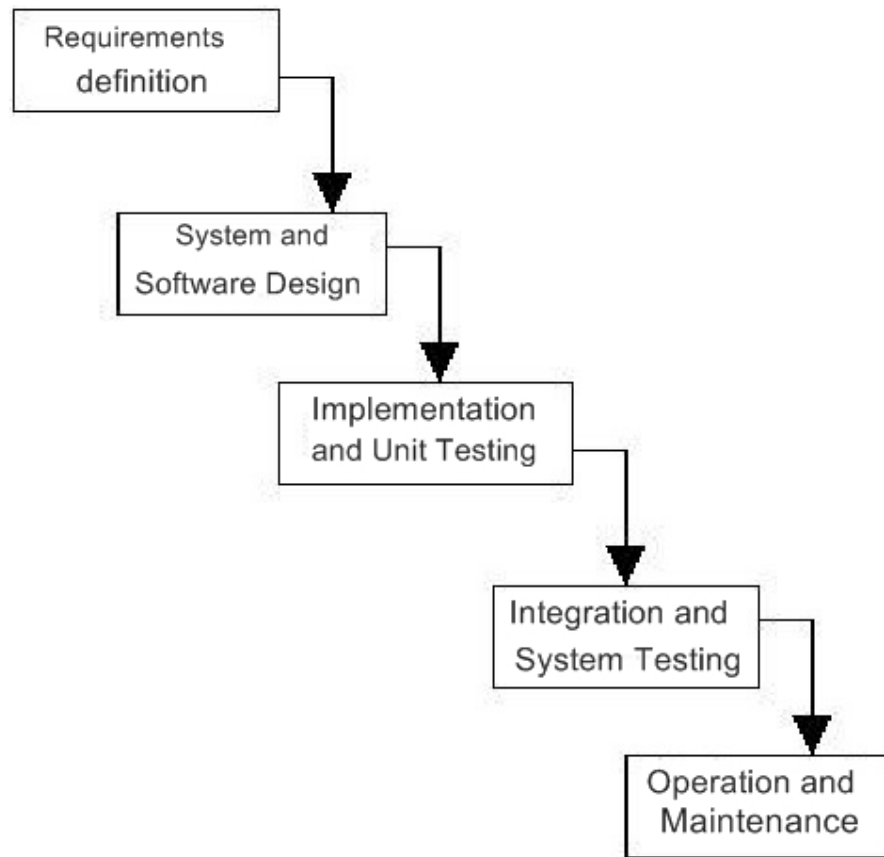


Figure 2.2: Waterfall Model (Ain Sommerville, 2001a)

According to Figure 2.2, waterfall model takes the fundamental process activities of specification, development, validation and evolution and represents them as separate process phase such as (Ain Sommerville, 2001a):

i. Requirements Analysis and Definition

The system's services, constraints and goals are established by consultation with system users. They are defined in detail and serve as a system specification.

ii. System and Software Design

The systems design process partitions the requirements to either hardware or software system. It establishes an overall system architecture. Software design